

CLAIMS:

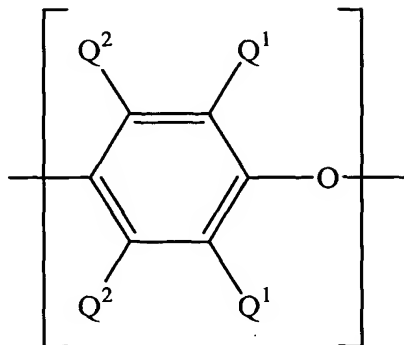
1. An under hood component comprising a poly(arylene ether)/polyolefin blend, a reinforced poly(arylene ether)/polyolefin blend or a combination of the foregoing.

2. The under hood component of Claim 1, wherein the polyolefin comprises a homopolymer or copolymer having greater than or equal to about 80 weight percent of units derived from polymerization of ethylene, propylene, butylene, or a mixture thereof.

3. The under hood component of Claims 1, wherein the polyolefin comprises a homopolymer of polypropylene, or a random, graft, or block copolymer of propylene and at least one olefin selected from ethylene and C₄-C₁₀ alpha-olefins, wherein the copolymer comprises greater than or equal to about 80 weight percent of repeating units derived from propylene.

4. The under hood component of Claim 1, wherein the polyolefin comprises a homopolypropylene.

5. The under hood component of Claim 1, wherein the poly(arylene ether) comprises a plurality of structural units of the formula



wherein for each structural unit, each Q^1 is independently hydrogen, halogen, primary or secondary C_1 - C_8 alkyl, phenyl, C_1 - C_8 haloalkyl, C_1 - C_8 aminoalkyl, C_1 - C_8 hydrocarboxy, or C_2 - C_8 halohydrocarboxy wherein at least two carbon atoms separate the halogen and oxygen atoms; and each Q^2 is independently hydrogen, halogen, primary or secondary C_1 - C_8 alkyl, phenyl, C_1 - C_8 haloalkyl, C_1 - C_8 aminoalkyl, C_1 - C_8 hydrocarboxy, or C_2 - C_8 halohydrocarboxy wherein at least two carbon atoms separate the halogen and oxygen atoms.

6. The under hood component of Claim 5, wherein each Q^1 is independently C_1 - C_4 alkyl or phenyl, and each Q^2 is independently hydrogen or methyl.

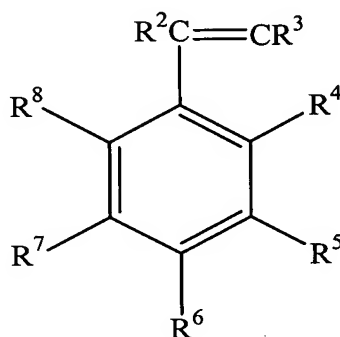
7. The under hood component of Claim 1, wherein the poly(arylene ether) is a copolymer of 2,6-dimethylphenol and 2,3,6-trimethylphenol.

8. The under hood component of Claim 1, wherein the poly(arylene ether) is present at about 5 weight percent to about 95 weight percent, based on the total weight of the poly(arylene ether) and polyolefin.

9. The under hood component of Claim 1 further comprising a hydrogenated alkenyl aromatic compound/conjugated diene block copolymer, an unhydrogenated alkenyl aromatic compound/conjugated diene block copolymer or a combination of a hydrogenated alkenyl aromatic compound/conjugated diene block copolymer and an unhydrogenated alkenyl aromatic compound/conjugated diene block copolymer.

10. The under hood component of Claim 9, wherein the hydrogenated block copolymer comprises:

(A) at least one block derived from an alkenyl aromatic compound having the formula



wherein R^2 and R^3 each represent a hydrogen atom, a C_1 - C_8 alkyl group, or a C_2 - C_8 alkenyl group; R^4 and R^8 each represent a hydrogen atom, a C_1 - C_8 alkyl group, a chlorine atom, or a bromine atom; and R^5 - R^7 each independently represent a hydrogen atom, a C_1 - C_8 alkyl group, or a C_2 - C_8 alkenyl group, or R^4 and R^5 are taken together with the central aromatic ring to form a naphthyl group, or R^5 and R^6 are taken together with the central aromatic ring to form a naphthyl group; and

(B) at least one block derived from a conjugated diene, in which the aliphatic unsaturated group content in the block (B) is reduced by hydrogenation.

11. The under hood component of Claim 9, wherein the hydrogenated block copolymer comprises a styrene-(ethylene-butylene)-styrene triblock copolymer.

12. The under hood component of Claim 9, wherein the hydrogenated block copolymer has a styrene content of about 50 to about 85 weight percent.

13. The under hood component of Claim 9, wherein the hydrogenated block copolymer has a styrene content of about 55 to about 70 weight percent.

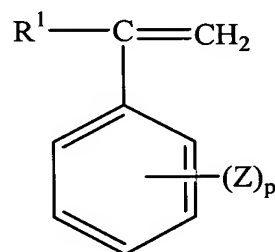
14. The under hood component of Claim 9, wherein the hydrogenated block copolymer is present at about 1 weight percent to about 20 weight percent, based on the total weight of the composition.

15. The under hood component of Claim 9, wherein the unhydrogenated block copolymer comprises a styrene-butadiene diblock copolymer or a styrene-butadiene-styrene triblock copolymer.

16. The under hood component of Claim 9, wherein the unhydrogenated block copolymer of alkenyl aromatic compound and a conjugated diene is present at about 0.5 weight percent to about 20 weight percent, based on the total weight of the composition.

17. The under hood component of Claim 1, further comprising a poly(alkenyl aromatic) resin.

18. The under hood component of Claim 17, wherein the poly(alkenyl aromatic) resin comprises at least 25% by weight of structural units derived from an alkenyl aromatic monomer of the formula



wherein R^1 is hydrogen, $\text{C}_1\text{-C}_8$ alkyl, or halogen; Z is vinyl, halogen, or $\text{C}_1\text{-C}_8$ alkyl; and p is 0 to 5.

19. The under hood component of Claim 18 wherein the poly(alkenyl aromatic) resin comprises a poly(alkenyl aromatic) resin selected from the group consisting of atactic homopolystyrene, syndiotactic homopolystyrene, rubber-modified polystyrene, and mixtures comprising at least one of the foregoing poly(alkenyl aromatic) resins.

20. The under hood component of Claim 17, wherein the poly(alkenyl aromatic) resin is present at about 1 weight percent to about 70 weight percent, based on the total weight of the blend.

21. The under hood component of Claim 1 further comprising a polyolefin-graft-cyclic anhydride copolymer.

22. The under hood component of Claim 21, wherein the polyolefin-graft-cyclic anhydride copolymer is a polypropylene-graft-maleic anhydride copolymer.

23. The under hood component of Claim 21, wherein the polyolefin-graft-cyclic anhydride copolymer is present at about 0.1 to about 10 weight percent, based on the total weight of the composition.

24. The under hood component of Claim 1, wherein the reinforced poly(arylene ether)/polyolefin blend comprises a reinforcing filler selected from the group consisting of glass fibers, long glass fibers, talc, quartz fibers, carbon fibers, potassium titanate fibers, silicon carbide fibers, boron carbide fibers, gypsum fibers, aluminum oxide fibers, iron fibers, nickel fibers, copper fibers, wollastonite fibers, poly(ether ketone) fibers, polyimide benzoxazole fibers, poly(phenylene sulfide) fibers, polyester fibers, aromatic polyamide fibers, aromatic polyimide fibers, aromatic polyetherimide fibers, acrylic fibers, poly(vinyl alcohol) fibers, polytetrafluoroethylene fibers, conductive filler and combinations of two or more of the foregoing reinforcing fillers.

25. The under hood component of Claim 24, wherein the reinforcing filler comprises glass fibers having a diameter of about 2 to about 25 micrometers.

26. The under hood component of Claim 24, wherein the reinforcing filler comprises a surface coating in an amount effective to increase compatibility with the polyolefin.

27. The under hood component of Claim 24, wherein the reinforcing filler is present at about 1 weight percent to about 80 weight percent, based on the total weight of the composition.

28. The under hood component of Claim 1 further comprising a polypropylene-polystyrene graft copolymer having a propylene polymer backbone and one or more styrene polymer grafts.

29. The under hood component of Claim 28, wherein the polypropylene-polystyrene graft copolymer comprises about 10 to about 90 weight percent propylene polymer backbone and about 90 to about 10 weight percent styrene polymer grafts.

30. The under hood component of Claim 28, wherein the polypropylene-polystyrene graft copolymer is present at about 0.5 weight percent to about 20 weight percent, based on the total weight of the composition.

31. The under hood component of Claim 1, further comprising an ethylene/alpha-olefin elastomeric copolymer at about 0.5 weight percent to about 25 weight percent, based on the total weight of the composition.

32. The under hood component of Claim 31, wherein the ethylene/alpha-olefin elastomeric copolymer comprises a copolymer of ethylene and at least one C₃-C₁₀ alpha-olefin.

33. The under hood component of Claim 32, wherein the ethylene/alpha-olefin elastomeric copolymer comprises an ethylene-butylene rubber, an ethylene-propylene rubber, or a mixture thereof.

34. The under hood component of Claim 1, further comprising an additive selected from the group consisting of stabilizers, mold release agents, processing aids, flow promoters, flame retardants, drip retardants, nucleating agents, UV blockers, dyes, pigments, particulate fillers, antioxidants, anti-static agents, blowing agents, and combinations comprising two or more of the foregoing additives.

35. An underhood component comprising

a poly(arylene ether)/polyolefin blend;

a hydrogenated alkenyl aromatic compound/conjugated diene block copolymer;

a poly(alkenyl aromatic) resin;

and a polyolefin-graft-cyclic anhydride copolymer.

36. A radiator end cap comprising:

a poly(arylene ether); a poly(alkenyl aromatic) resin; a rubber-modified poly(alkenyl aromatic) resin; a polyolefin; a hydrogenated block copolymer of alkenyl aromatic compound and a conjugated diene; a polyolefin-graft-cyclic anhydride copolymer; and a reinforcing filler.

37. A radiator end cap comprising a poly(arylene ether)/polyolefin blend, a reinforced polyolefin, a reinforced poly(arylene ether)/polyolefin blend or a combination of two or more of the foregoing.